# Tribal Public Water Supply Source Water Assessment and Protection Program: 2004 Requests for Proposals

#### Overview

EPA Region 9 is soliciting proposals for the Tribal Public Water Supply Source Water Assessment Program (SWAP) and Source Water Protection Program (SWPP). The purpose of this cooperative agreement program is to provide funding to enable tribes to assess any possible threats to their public drinking water supply sources and to develop protection measures to protect these sources against those threats. This is an initial solicitation. This assistance will be awarded through §1442 (c)(3) of the Safe Drinking Water Act (42 USC § 300j-1(c)(3)).

Catalog of Federal Domestic Assistance Number: 66.424

# **Important Dates:**

December 17, 2004-- Proposals must be postmarked for submittal to EPA. July1, 2005–Grants will be awarded by EPA.

#### Contents of Full Text Announcement:

I. Funding opportunity description

II. Award information

III. Eligibility information

IV. Initial proposal submission information

V. Initial Proposal Review Information

VI. Award administration

VII. Agency contacts

VIII. Other information

# Tribal Public Water Supply Source Water Assessment and Protection Program: 2004 Requests for Proposals

#### **Full Text Announcement**

# I. Funding Opportunity Description

The purpose of the Source Water Assessment and Protection Program is to enable tribes to assess any possible threats to their public drinking water supply sources and to develop protection measures to protect these sources against those threats. Source Water Assessment Programs (SWAPs) include basic elements of delineating source water areas around the drinking water source, identifying potential sources of contamination that may impact the protection area, determining the susceptibility of the identified potential sources of contamination to a drinking water source, and communicating the results to the served community. Source Water Protection Programs (SWPPs) take assessment efforts a step further and require on-the-ground management strategies based on community-wide involvement (e.g., through the design of control measures such as zoning ordinances, public outreach, and contingency plans), to manage identified potential contaminating activities.

Completion of an assessment and source water protection program is advantageous in protecting against the pollution of lakes, rivers, streams, and groundwater that serve as sources of drinking water. Source water protection programs can be part of other protection efforts such as watershed protection, pesticide management, or non-point source reduction.

Guidance on the preparation of work plan proposals, is provided below.

#### **II. Award Information**

EPA Region 9 Water Division intends to award an estimated \$600,000 to eligible applicants through assistance agreements ranging in size from \$15,000 up to \$60,000 for SWAP and SWPP completion. From the Initial Proposals (IPs) received, EPA estimates that 85-95 percent of projects may be selected to submit full applications.

Substantial involvement is anticipated between EPA and award recipient. Such involvement will include: EPA participation (technical assistance) in project activities and EPA collaboration on the work plan narrative and organizational structure.

# III. Eligibility Information

Federally recognized tribes within EPA Region 9 geographic area of: Arizona, California, Hawaii and Nevada who operate at least one public (serves at least 20 or more persons and/or has at least 15 connections) water system are eligible for funding under this grant. Tribes must

have successfully completed the SWAP process before pursuing funding for the implementation of a SWPP. There should be a link between the completed SWAP and the proposed protection measures. No matching funds are required. Costs incurred prior to grant award will not be reimbursed.

#### These funds may not be used for the following:

- Activities that are the function of a water utility, such as normal operation and maintenance, monitoring requirements, or construction activities.
- Exploratory work, (both physical and literature searches) for development of new drinking water source(s).
- SWAP and/ or SWPP projects with privately owned water systems

Please do not submit proposals that duplicate the functions of other grant programs.

# IV. Initial Proposal Submission Information

Initial proposals (IPs) should follow guidance provided below. It is recommended that confidential information not be included in the IP. Costs incurred prior to grant award will not be reimbursed. Please note that Research is ineligible for funding as well as other ineligible costs outlined in 40 CFR Parts 30 and 31.

# The following format should be used for all IPs:

All interested in applying must prepare and submit a proposal which will include a summary, general background information, budget, and program work plan. Background information should include:

#### **SUMMARY**

- A. Purpose and Goals. Briefly describe the purpose and goals of the project. Include information on what will be accomplished, how it will serve the tribal members and protect, and preserve the drinking water sources.
- B. Cost. The total cost of the proposal and a detailed budget justification should be included in this section.
- C. Staff Capability. The applicant should also identify existing staff capability to carry out the objectives/activities of the proposal, and additional training that might be required of existing staff. If the applicant does not have sufficient staff, the applicant should identify staff required, mechanism for hiring, and time-frames. If the applicant intends to contract out any of the work, this should be explained in detail, and justified as to how this will help to develop tribal infrastructure and capabilities.

#### GENERAL BACKGROUND INFORMATION

A brief general introduction giving background information on the Tribe and public water supplies on Tribal lands should be provided. A sample outline with required information is provided below:

A. Reservation size and population; drinking water supply sources; number and ownership status (tribal or privately owned) of public water supply systems; type of public water system (ground water or surface water based); population served by each public water system; surrounding communities and activities (both on and off reservation) that could affect the reservation's drinking water supply sources, such as farming, industry, agricultural production/processing, livestock, septic system failure, etc.

Please provide the following information:	
Reservation size:	
Population of Reservation:	
List of drinking water supply sources:	

Please prepare and include a table similar to the following example:

System Name	Source Name	Population per Source	Population Per System	Source Type	Well Depth	In Use (Y/N)
Main System	Well 1	25	150	ground water	150 ft	Y
Main System	Well 2	125	150	ground water	200 ft	Y

- B. Description of any existing or proposed tribal utility authorities or inter-tribal utilities or consortia that deal with public water supplies.
- C. Any additional information which would help EPA reviewers understand reservation conditions and needs related to drinking water supply source protection issues, and management and organizational needs related to understanding and meeting federal drinking water regulations.

#### **Steps for Source Water Assessment Projects (SWAP)**

Work plans should include the following steps in completing the assessment and will be evaluated accordingly.

#### **Step 1:** Delineate the source water protection areas

A delineated area is the portion of a watershed or ground water area that may contribute pollution to the water supply. Delineations should map the areas that are vulnerable to ground and surface water contamination (source water protection areas). This may include the area surrounding a well or surface water in-take location, in addition to zones of recharge outside of these areas. EPA encourages surveying drinking water sources and respective source water protection area using a Global Positioning System (GPS). The work plan should indicate the number of wells to be assessed and the proposed delineation method.

#### Delineation methods include:

- Arbitrary Fixed Radius
- Calculated Fixed Radius
- Mod Flow Equation
- Delineations using Modeling (e.g.., WHPA, WhAEM, Modflow, Modpath, etc.)

NOTE: Wellhead and geologic data collection must be included in the work plan as a task as part of the delineation and must be done before delineating. Data collection can include: well driller logs, pump tests, USGS information, etc.

# Step 2: Conduct an inventory of potential sources of contamination within the delineated source water protection areas.

Identification of all significant potential sources of drinking water contamination within a source water protection area. The resulting contamination source inventory must describe the sources (or categories of sources) of contamination either by specific location or by area. EPA recommends that potential sources of contamination be surveyed using a Global Positioning System (GPS).

In addition, an Inventory process should include:

- Identification significant potential sources (including underground injection control (UIC) wells such as septic systems, industrial waste disposal wells and storm water drainage wells)
- Identification of contaminants of concern from each identified source (should also refer to existing water quality data for each of the sources to point out existing contaminants of concern)
- Review from existing sources of information for the geographic area (e.g., use Federal, State, and local databases)

# Step 3: Susceptibility analysis determination for each public water system

Determination of the water supply's susceptibility to contamination from identified potential sources of contamination. The susceptibility determination can be either an absolute measure of the potential for contamination of the public water system or a relative comparison between sources within the source water protection area. This step enables the Tribe to determine which sources are most threatening to their water system.

The susceptibility determination may be based on:

- Hydrologic and hydrogeologic factors such as ground water or surface water movement;
- Characteristics of the contaminants (e.g., toxicity, environmental fate and transport);
- Characteristics of the potential source of the contaminant (location, likelihood of release, effectiveness of mitigation measures); and
- Other factors such as well intake and well integrity.

### **Step 4:** Making results of assessment available to public

Distribution of the source water assessment results to the public. Assessments are not considered complete until results are communicated to the public. It is recommended that results be included in the Tribe's Consumer Confidence Reports (CCR). Results of the assessments can also be disseminated in public meetings, newsletters, at public building, via radio announcements, direct mailings, etc.

#### **Measures for Source Water Protection Programs (SWPP)**

Tribes must have successfully completed the SWAP process before pursuing funding for the implementation of a SWPP. A typical first step in developing SWPPs is creating a source water protection management plan. Management plans should be designed to manage potentially contaminating sources and activities identified in completed SWAPs. Below is a list of suggested management measures and protection tools which may be utilized as SWPP measures. For more examples, see *Protecting Drinking Water: A Workbook For Tribes* (see Section VII). For activity eligibility, see Request For Proposals Sections III and V or contact EPA.

#### **Common Management Measures/Tools**

- Development of a source water protection management plan (based on source water assessment).
- Establishment of SWP Team
- Zoning Ordinances
- Public Outreach and Education
- Source Prohibitions
- Land Purchase Research Activities
- Subdivision Ordinances
- Best Management Practices (BMP)
- Contingency Plans

### **Management Measure Example: Contingency Plan**

Contingency plans are documents that establish up-to-date procedures necessary to utilize alternative water supply sources in the event of contamination or loss of existing drinking water sources (i.e., alternative water sources in the event of contamination).

The following is a list of components to include in a contingency plan:

- Description of Water System
- Summary of Potential Sources of Contamination
- Emergency Response Procedures to address each scenario
- Alternative Water Supply Options
- Priority Water Users and Conservation Measures
- Notification Roster (i.e., list of contacts in the event of a contaminant spill)
- Public Education/Media Relations
- Training and Practice Runs
- Event and Action Log

#### **WORKPLAN FORMAT**

The proposal should include a detailed work plan which states the tasks to be completed, the outputs and deliverables to be accomplished, the amount of time devoted to each task, the staff responsible to complete the work, the time schedule by which tasks are to be started and completed, and the funding required for each task.

#### **Sample Table**

Task Description	Deliverable	Hours (entity)	Schedule (start date to target date)	Funding Required
Collect wellhead and geological data before delineation (e.g., well drillers log, pump test, etc.)				
2. Conduct Delineation Determination using Mod Flow equation method, and Map Source Water Areas	Delineation Report - GIS Maps of Source Water Areas			
3. Submit quarterly reports	- Reports and associated deliverables			
	Total	•••		\$

The work plan must clearly state the deliverables at the conclusion of the awarded grant. These outputs should reflect the four SWAP steps and/or SWPP protection measures (SWAP steps and SWPP protection measures are outlined on the following pages).

A work plan must also account for quarterly reports, (see Section VI part3.)

#### Please send one copy of the IP to:

Tribal SWAP/SWPP Proposals U.S. EPA Region 9 (WTR-9) 75 Hawthorne St. San Francisco, CA 94105 **For additional information**, please contact the project officers for your geographic area as provided below:

Lisa Penaska, Project Officer	(415) 972-3544
Jenny Mann, Project Officer (Alternate)	(415) 972-3512
Tribes in Central California	

Eric Byous, Project Officer	(415) 972-3531
Tribes in Southern California and along the Colorado	River in Arizona

Jenny	y Mann, Proje	ect Officer				(415) 972-3512
CD 11	* NT /1	1.0 .1	A .	OD 11	• a.r	1

Tribes in Northern and Southern Arizona, Tribes in Nevada

Jamelya Curtis, Project Officer	(415) 972-3529
Jenny Mann, Project Officer (Alternate)	(415) 972-3512
Tribes in Northern California	

IPs must be received by EPA by December 17, 2004. Proposals received after this date will be reviewed solely at the discretion of EPA.

# V. Initial Proposal Review Information

EPA will award Water Quality Cooperative Agreements on a competitive basis/and evaluate IPs based on the following criteria:

- A completed proposal including a budget, and program work plan submitted by December 17, 2004 (see Section IV for proposal guidance).
- o Identification of the necessary steps in developing a SWAP or appropriate approach to a SWPP (see Section IV for SWAP steps and suggested SWPP measures).
- o Demonstration that a need exists and how the work plan addresses that need.
- o Demonstration of public health need and/or the need to develop tribal capacity to establish base level environmental protection of drinking water supply sources.
- o Qualified staff and/or capability to administer the grant and carry out the project, including performance on past EPA program grants.
- o Demonstration that the tribe will build capacity in this area and the obtained information will be used in developing a protection program.

Proposal disqualification will be automatic if the activities in the work plan are determined to be the function of a water utility, such as operation and maintenance, or construction of facilities.

The IPs will be evaluated by EPA staff on a pass/ fail basis. The criteria above will have essentially equal weight. Final selection will be made by EPA Tribal Source Water Protection group. Selected recipients will be notified and requested to submit a full application.

#### VI. Award Administration

Proposals that are selected for continuance in the process will be sent an application kit for funding. These recipients will be invited to submit a detailed work plan and a completed application for funding. Receipt of an application kit is not a guarantee of funding. Deadlines must be met and the work plan must be approved by the EPA Project Officer for funding to occur. Award notices will be sent to selected recipients by July, 2004.

Tribal entities will follow 40 Code of Federal Regulation (CFR) Part 31, 40CFR Part 35, subpart B, Office of Management and Budget (OMB) Circular A-87.

Quarterly and annual project status reports and a final report will be required.

Quarterly reports for both SWAP and SWPP projects should include: summary and status of each task as identified in work plan; explanation of delays and expected date of completion, if applicable; copies of any deliverables; and expenditures per each task to date. The final report for SWAP and SWPP projects should summarize the project and be a synopsis of the items listed above. The final report of a SWAP project should also identify potential SWP measures to implemented.

**Disputes:** Procedures at 40 CFR 30.63 and 40 CFR 31.70 will apply.

**Confidentiality:** Applicants must clearly mark information they consider confidential and EPA will make confidentiality decisions in accordance with Agency Regulations at 40 CFR, Part 2, Subpart B.

EPA Reserves the right to reject all proposals and to not make any awards.

# VII. Agency Contacts

The project officers for each your geographic area as provided below:

Lisa Penaska, Project Officer Jenny Mann, Project Officer (Alternate) Tribes in Central California	(415) 972-3544 (415) 972-3512			
Tribes in Central Camornia				
Eric Byous, Project Officer	(415) 972-3531			
Tribes in Southern California and along the Colorado River in Arizona				
Jenny Mann, Project Officer	(415) 972-3512			
Tribes in Northern and Southern Arizona, Tribes in Nevada				
Landa Carria Daria de Offica a	(415) 070 2520			
Jamelya Curtis, Project Officer	(415) 972-3529			
Jenny Mann, Project Officer (Alternate)	(415) 972-3512			

#### VII. Other Information

Tribes in Northern California

Protecting Drinking Water: A Workbook for Tribes is produced by Water Education Foundation with funding and assistance from EPA provides guidance on understanding the Source Water Assessment and Protection Programs and their importance. Protecting Drinking Water: A Workbook for Tribes is available online at the following URL: http://www.watereducation.org/specialprojects.asp#tribalbook. To request a hard copy, contact EPA. Not all SWAP and SWPP activities and measures listed in Protecting Drinking Water: A Workbook for Tribes may be funded under this grant. Please refer to Section III "Eligibility Information" for guidance.